ILLINOIS HIGHWAY INFORMATION SYSTEM ROADWAY INFORMATION AND PROCEDURE MANUAL

ITEM NAME VERTICAL CURVE APPROACH GRADE					ITEM NO. 91 PAGE 1 of 2
ENTERED BY	STATE	NON- STATE	HPMS	MUNI	EFFECTIVE DATE
District Program Development	YES	ОРТ	NA	NA	
UPDATE REPORTS	UPDATE SCREENS			INQUIRY SCREENS	
(13) Physical Char-Alignment	(13) Physical Char-Alignment				(63) Physical Char-Alignment

DESCRIPTION AND PURPOSE OF ITEM

This item indicates the approach grade to a deficient vertical curve in the direction of route stationing. Only those vertical curves on non-FAI state system routes, not within a municipality, meeting the following criteria will be required to be reported.

- (a) Crest vertical curves where the length of the curve, in feet, divided by the algebraic difference in grade is equal to 290 or less.
- (b) Sag vertical curves where the length of the curve, in feet, divided by the algebraic difference in grade is equal to 150 or less.

Note: "Algebraic difference" is the number derived by subtracting the Approach and Departing Grades (taking into consideration the sign) of a curve.

This information is used to relate traffic accidents with vertical curve data.

This item can be obtained from construction plans or, if plans are unavailable, field review. If in question, contact the district Bureau of Program Development.

Note: This item is collected on new or reconstructed routes only.

CODE AND SCREEN ENTRY INSTRUCTIONS

A 5-digit signed number.

Record the approach grade to the nearest hundredth of a percent.

Record a plus (+) to indicate uphill or a minus (-) to indicate downhill on the approach grade in the direction of route stationing.

Record the decimal point.

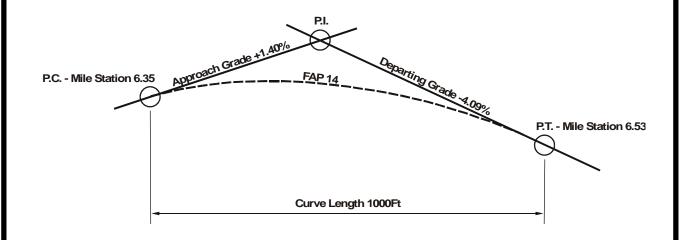
Record the sign (+ or -) in the <u>first</u> digit, and the grade <u>to the nearest hundredth of a percent</u> in the next four digits.

ILLINOIS HIGHWAY INFORMATION SYSTEM ROADWAY INFORMATION AND PROCEDURE MANUAL

ITEM NAME

VERTICAL CURVE APPROACH GRADE

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+1.40	Vertical Curve Approach Grade (Item 91)
006.35	Vertical Curve PC Station (Item 91A)
006.53	Vertical Curve PT Station (Item 91B)
-4.09	Vertical Curve Departing Grade (Item 92)

Note: Algebraic difference in grade is -4.09 - (+1.40) or 5.49. Length divided by Algebraic difference is 1000/5.49 or 182.1.